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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,614	08/05/2005	Joerg Issbemer	262338US0PCT	8527
22850	7590	03/30/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BERNSHTEYN, MICHAEL	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 03/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/517,614	ISSBERNER ET AL.	
	Examiner	Art Unit	
	Michael Bernshteyn	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 3-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/02/2005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: inconsistent terminology and spelling error. It would be proper to list: "A water-soluble copolymer" instead of "Water-soluble copolymers" and "...in an aqueous phase" instead of "...in the aqueous phase". Accordingly, the preamble in claim 2 should be changed to "The copolymer ...". Appropriate correction is required.
2. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n).
3. Claims 4-23 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 3-23 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Behr et al. (U. S. Patent 5,756,624).

Behr discloses a method of tackifying an adhesive comprising the use of a copolymer consisting of monomer units derived monomers consisting of:

- A) 10 to 50% by weight of a terpene with no conjugated double bonds,
- (B) 20 to 50% by weight of a member selected from the group consisting of olefinically unsaturated monocarboxylic acids containing 3 to 5 carbon atoms and

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anhydrides thereof, and olefinically unsaturated dicarboxylic acids containing 3 to 5 carbon atoms and anhydrides thereof, and

C) 40 to 50% by weight of an ester selected from the group consisting of esters and semiesters of olefinically unsaturated monocarboxylic containing 3 to 5 carbon atoms and esters and semiesters of olefinically unsaturated dicarboxylic acids containing 3 to 5 carbon atoms, with the proviso that the sum total of said monomers is 100% by weight (abstract).

The terpenes used include, for example, α -pinene, β -pinene, terpinolene, limonene (dipentene), β -terpinene, γ -terpinene, etc. (col. 1, lines 50-60). Of the terpenes containing an internal double bond, limonene/dipentene, β -pinene, camphene and linalool are mentioned in particular (col. 1, lines 63-65). This group is readable in applicant's claims as being monomer (b1).

The comonomer B) is selected from olefinically unsaturated mono-and/or dicarboxylic acids containing 3 to 5 carbon atoms or anhydrides thereof. Specific examples are maleic anhydride, maleic acid, fumaric acid, acrylic acid, methacrylic acid, itaconic acid and crotonic acid (col. 1, line 66 through col. 2, line 3). This group is readable in applicant's claims as being monomer (a).

The comonomer C) is selected from vinyl monomers, for example styrene, vinyl chloride, vinylidene chloride, vinyl acetate, vinyl ether, acrolein and acrylonitrile. Preferred comonomers C) are esters and/or semiesters of olefinically unsaturated monocarboxylic and/or dicarboxylic acids containing 3 to 5 carbon atoms, for example acrylates, methacrylates, maleic acid semiesters and diesters, fumaric acid semiesters

and diesters, itaconic acid esters and crotonic acid esters. Mixtures of these compounds may also be used. Esters of long-chain alcohols containing 6 to 22 carbon atoms are preferably used (col. 2, lines 7-20). This group is readable in applicant's claims as being monomer (b3).

Behr discloses that the polymerization reaction is a radical polymerization preferably carried out in the absence of a solvent, i.e. in bulk. Solvents in the present context are understood to be organic liquids, which are capable of dissolving the terpene copolymer or the comonomers or monomers at room temperature. Azo compounds, and, above all, organic peroxides are used as radical initiators (col. 2, lines 30-36 and Example 32, col. 9, lines 5-27). The copolymers may be used as tackifiers in adhesives, in paints and as binders for printing inks, textile sizing agents, builders and hardeners. Copolymers with esters to which a relatively long-chain alcohol radical is attached are suitable for hydrophobization, for example for hydrophobizing shoe and clothing leather (col. 3, lines 17-23).

In the absence of showing criticality of obtaining the copolymers by radical polymerization in the aqueous phase, regarding the copolymers limitations in view of substantially identical monomers, their concentration, radical initiators, steps of the process of radical polymerization producing such products: duration, temperature, etc. (compare US'624, Example 32, col. 9, lines 5-27, and the specification, pages 18-20, Examples 1 and 2) being used by both Behr and the applicant, it is the examiner position to believe that the product, i.e. copolymer of Behr is substantially the same as the water-soluble copolymer recited in claim 1, even though obtained by a different

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process, consult *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Since the USPTO does not have proper equipment to do the analytical test, the burden is now shifted to the applicant to prove otherwise.

Conclusion

Other references are considered pertinent to the Applicant disclosure but not cited in this office include U.S. Patents 2,837,496, 4,975,504, 5,693,731, 6,805,954, 6,927,315, U.S. Patent Application Publications 2002/0032264 and 2004/0044138 are shown on the Notice of References Cited Form (PTO-892)

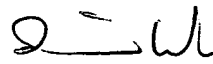
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
03/22/2006


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